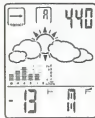


Altimeter Mode

Setting measuring unit and current altitude : M/Ft
In Altimeter mode hold button A until M/Ft starting to flicker.
Press button B to select. Press button A to confirm and digit start to flicker, repeat procedure to enter altitude.

Reset Altimeter to sea level 0 Go to altimeter meter setting mode.
Repeat procedure to altitude setting, hold button A, the current altitude will reset to 0



Max/Min Altitude
In altimeter mode, press button B to show max/min altitude. Max/Min display sequentially

THE BAROMETER

Press button A to enter the Barometer Mode.
Maximum and Minimum

- Press button B to enter the Memory mode.
- The memory of maximum and minimum barometer will be scrolled on the display automatically.
- To reset the memory, press and hold button B. At the same time, the memory for the hygrometer and the thermometer will be reset also.
- Left it return automatically to Normal Mode after 50 seconds.



The Atmospheric Pressure Bar Chart

- Press button B to enter the Bar Chart mode.
- The atmospheric pressure chart records the atmospheric changes for the past 12 hours and it will be scrolled on the display automatically.

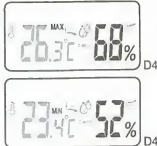


- The history hours are:
 - 0 H = Current
 - 1 H = Past 1 hour
 - 2 H = Past 2 hours
 - 3 H = Past 3 hours
 - 6 H = Past 6 hours
 - 12 H = Past 12 hours
- To reset the records, press and hold button B.
- Press button B to quit or left it return automatically to Normal Mode after 50 seconds.



THE HYGROMETER

- A build-in sensor measure humidity and shows on the display.
- To call the Maximum and Minimum Memory, press button B to the mode.
- To reset the memory, press and hold button B. At the same time, the memory for the barometer will be reset also.



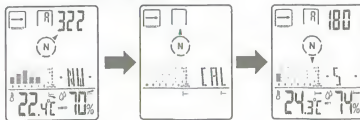
THE THERMOMETER

- A build-in sensor measure temperature and shows on the display.
- To call the Maximum and Minimum Memory, press button B to the mode.
- To reset the memory, press and hold button B. At the same time, the memory for the barometer will be reset also.



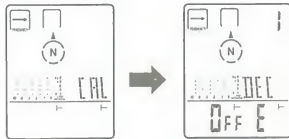
Compass Calibration and Environmental Interference

- It is important to know all digital compasses works with Earth's magnetic field and is very sensitive to different environments where the earth magnetic fields is distorted, such as interference by closing to heavy metal, home appliance, computer and high power cable...etc.
- To keep a high accurate heading information, you must calibrate the compass (1) when the magnetic distort message "Err" is continuously displayed (2) the numeric heading information with a error more than 10 degree (3) when the unit is used for the first time in a vehicle so as to separate the earth's field from the interference.



Enter Declination angle for the true North

- Declination refers to the measured difference between the magnetic North and the North of the map. The local declination is given on the map margin either as easterly plus declination (E) or as westerly minus declination (W). When orienteering, the map direction is corrected by subtracting the plus declination and adding the minus declination.
- To input the value, press and hold button A to enter calibration mode "CAL" first and press button A again to confirm to enter declination setting mode "dEC".
- Right after entering the declination setting mode, a letter "E" start to flicker. Press button B to select the direction East- E or West- W and then press button A to confirm.
- An angle digits will then start to flicker. To set the angle to be offset, press button B to adjust to desire value an then press button A to confirm.
- As the declination setting will affect the direction directly, for a serious and final confirmation, press button B to turn the function "o" and then press button A again to confirm.
- In order to understand the declination effect, let us quote an example, the current direction is N 10 degree, If the declination angle is set to E 30 degree, the final will change to NE 40 degree or If the declination angle is set to W 30 degree, the final direction will change to NW 340 degree



EL BACKLIGHT

Any time press left button will turn EL on for 3 sec.

How to Calibrate the Compass

- Press button A to the Compass mode.
- Press and hold button A to enter calibration mode "CAL" and then press button B to start. The ring will then display and turn.
- Turn the unit clockwise in two circles on a level surface where it is free from unnecessary metal plate home appliance, computer and high power cable... etc. The circles do not need to be perfect circles, but must be completed in the same direction. It is also important that each circle takes a minimum of 20 seconds but less than 1 minutes to complete.
- Right after the calibration, press button B to confirm.
- Failure to do a correct calibration can result in inaccurate headings. Perform a new calibration again if a heading is suspected.

And the declination angles for major world cites are listed as follow:

City	Declination Angle	City	Declination Angle
Anchorage	22°E	Calgary	18°W
Atlanta	4°W	Chicago	3°W
Bombay	1°W	Denver	10°E
Boston	16°W	Jerusalem	3°E
London	4°W	Rio De Janeiro	21°W
Little Rock	3°E	San Francisco	15°E
Livingston, MT	14°E	Seattle	19°E
Munich	1°E	Shanghai	5°W
New York City	14°W	Toronto	11°W
Orlando	5°W	Vancouver	20°W
Oslo	2°W	Washington DC	10°W
Paris	2°W	Waterbury, CT	14°W

IMPORTANT NOTES

Altimeter

- Unfortunately all altimeter are going to be affected by barometric pressure (unless they are GPS controlled or similar) as this is what they use to calculate their height.
- To offset this barometric effect on altimeter, please keep a check and re-adujst the altimeter when you are at known heights or re-setting your watch to zero at sea-level.

Malfunction

Problem

Incorrect Compass Reading	Wrong Calibration or the environment of operation is changed. Do the Calibration again with correct instruction stated in the user manual.
"Err" display in Compass Mode	External Magnetic Interference, such as heavy metal, home appliance, computer and high power cable, etc... Escape from the interference or re-calibration again.
Incorrect Temperature Reading	Interference from direct sunlight, air conditioner or Heater vent. Move the unit away from the interference.
Display readout fades and incorrect readings	Poor battery or bad contacts. Take out battery and install again or install a new battery.
Black Display	Temperature too hot, or display exposed to direct sunlight too long.
Display shows irregular figures	Take out battery and install again.

SENSOR TECHNOLOGY

ALTIMETER
BAROMETER • COMPASS

INSTRUCTION MANUAL



Art No.:ABC713-Cara-EL-P3-GB
ERP: 501-65700--1E--STD01

FEATURES

Altimeter

Altitude range - -999 ~ 9999m / -2999 ~ 19999 ft

Resolution 1m / ft

Max / Min memory for altitude

Altitude trend indicator

Barometer

- Pressure Range 800 hPa/ mbar to 1099.9 hPa/ mbar

(23.63 inHg to 32.49 inHg)

- Resolution of 0.1 hPa/ mbar (0.01 inHg)

- Max./ Min. memory for Pressure

- Pressure History and Graphic display of the last

12 hours pressure readings

- Electronic Pressure Weather Forecast

(Sunny, Slightly Cloudy, Cloudy, Rainy)

- Pressure Trend Indicators

Electronic compass

3 mode display showing a compass arrow direction

numeric and cardinal readout

High accuracy of +/- 5 degree with +/- 1 resolution

Magnetic distortion alert

Thermometer

- Thermometer (0°C to +50°C)

- °C / °F selectable

- Max. / Min. memory for Thermometer

- Temperature Trend Indicators

Hygrometer

- Relative Humidity (20% ~ 99%)

- Max. / Min. memory for relative humidity

- Humidity Trend Indicators

Clock

- Time: Hr, Min

- 12 / 24hr selectable

EL Back Light

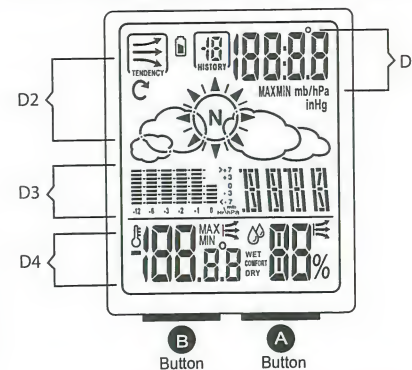
- EL backlight turn on 3 sec.

BATTERY INSTALLATION

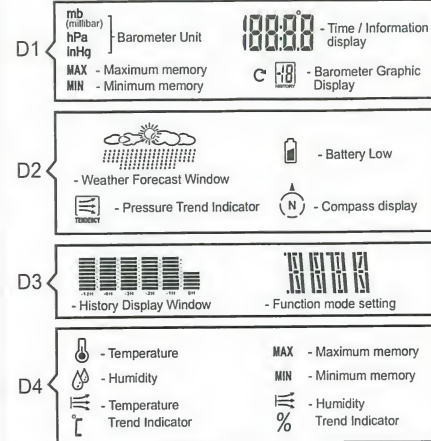
- Remove the battery cover from the bottom of the computer using a small coin. Install the 3 V battery (CR2032) with the positive (+) pole facing the battery cover and replace the cover as in Fig. 1.

WARNING, Battery may explode if mistreated. Do not recharge, disassemble or dispose of in fire.

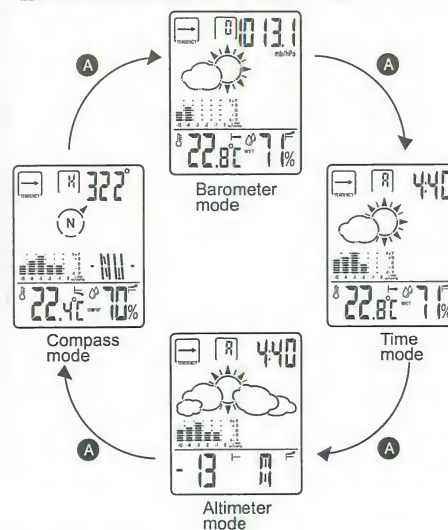
DISPLAY ICONS & KEYS ILLUSTRATION



ICONS



TO ENTER DIFFERENT MODE



WAKE UP YOUR COMPUTER

Insert the battery in battery compartment.

The data will displayed on the screen.

Notes: If display shows irregular figures or no data displayed, take out battery and install again.

BAROMETER SETTING

Barometer Unit (mb / hPa / inHg) Setting

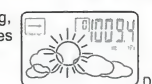
- Press button A to enter the Barometer Mode, press and hold button A until "mb hPa / inHg" flicker.
- To select mb hPa or inHg, press button B and then press button A to confirm.



Barometer and Weather States Adjustment

To adjust the barometer and weather states, weather forecast function can have a good initialization.

- Right after the barometer unit setting, the barometer digits will then start to flicker.
- Press button B to set and then press button A to confirm.
- Right after the barometer digits setting, press button B to select different states and then press button A to confirm.



Weather Forecast

- The unit is capable of detecting atmospheric pressure changes to predict the weather for the forthcoming 8 hours.
- The weather forecast is meant for the next 8 hours. It may not necessarily reflect the current weather situation.
- The accuracy of all general pressure-based technology weather forecast is about 70%, and therefore, cannot be held responsible for any inconveniences so caused by an inaccurate one.
- According to the barometric change, the pressure trend will indicate the weather is going fine (Fig. 1 UP), stable (Fig.2 Stable) and going worse (Fig. 3 Down).

There are four different states: Sunny, Slightly Cloudy, Cloudy and Rainy

Fig.1



(Going Fine)



Sunny

Fig.2



(Stable)



Slightly Cloudy

Fig.3



(Going Worse)



Cloudy



Rainy

Temperature Unit (°C / °F) Setting

- Right after the Barometer setting, the Celsius digit will then start to flicker.
- To select C or F, press button B and then press button A to confirm, and return to Barometer Normal Mode.



CLOCK SETTING

- Press button A to enter the Time Mode, press and hold button A until "12Hr / 24Hr" flicker, change to 12 Hr or 24 Hr by press button B and confirmed by button A.
- Continuing to set the correct time by button B and then press button A to confirm, and return to Time Normal Mode.

